UNIVERSITY of ROCHESTER | SIMON BUSINESS SCHOOL

Catholic Family Center

Simon Business School

- *MSBA Team 22*

Tongxin Guo

Handi Wang

Qiaofeng Li

Ruixuan Zhao

Zhuoyi Ying

CONTENTS

1. Overview

2. Program Effectiveness

3. Trajectory

4. Conclusions

Since 1917

CATHOLIC FAMILY CENTER

Give people hope and they can do anything

Overview

1

- Demographic
- Program Attending
- Admission Status
- Completion Rate

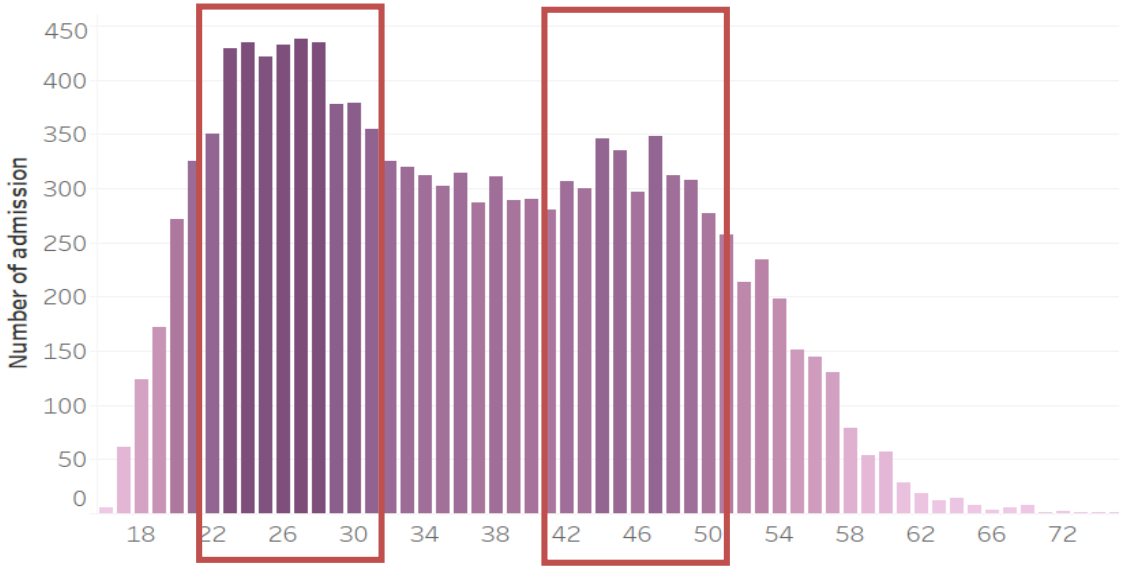
Since 1917

CATHOLIC FAMILY CENTER

Give people hope and they can do anything

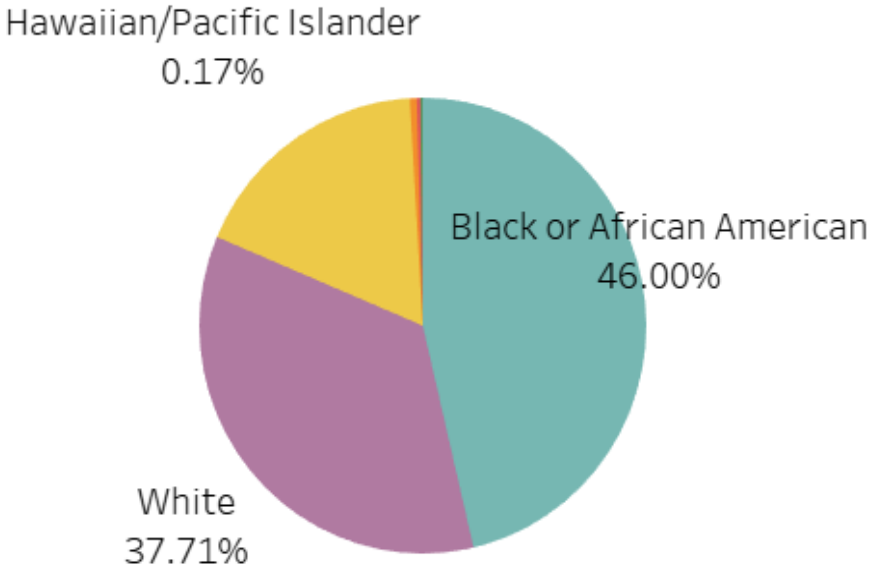
Overview - Demographic

❑ Age Of Admission



- **Age Group**: 22-30, 42-50

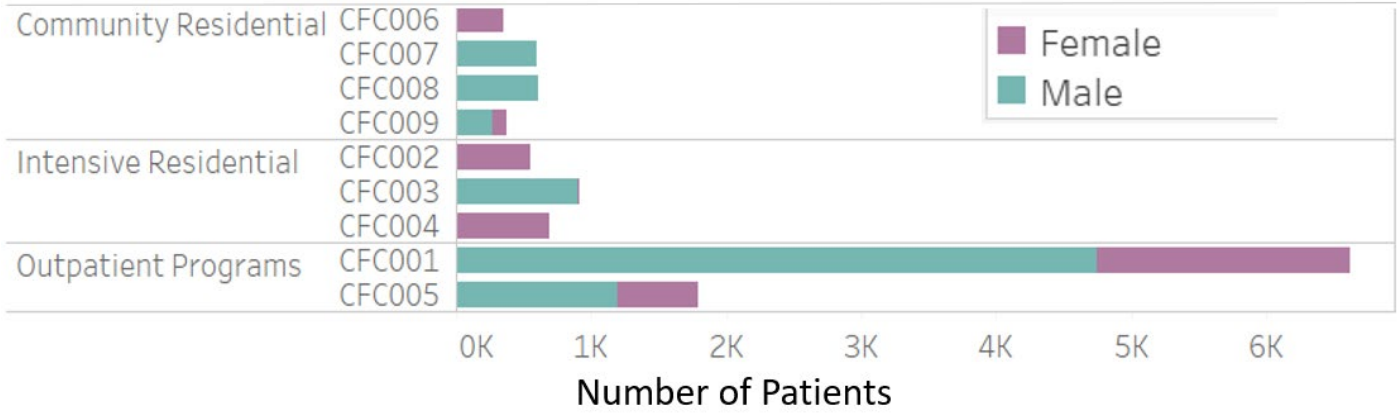
❑ Patients By Race



- **Race Group**: Mostly black

Overview - Demographic

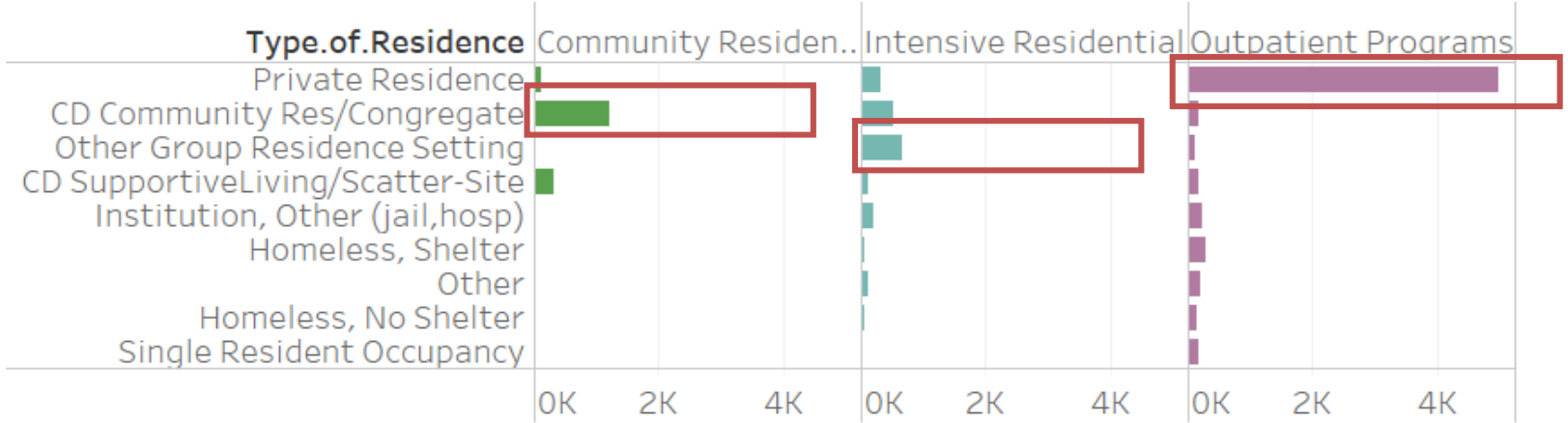
❑ Patients By Gender



- Overall, more males and females
- Some programs only admit males and some programs only admit females

❑ Residence before admission

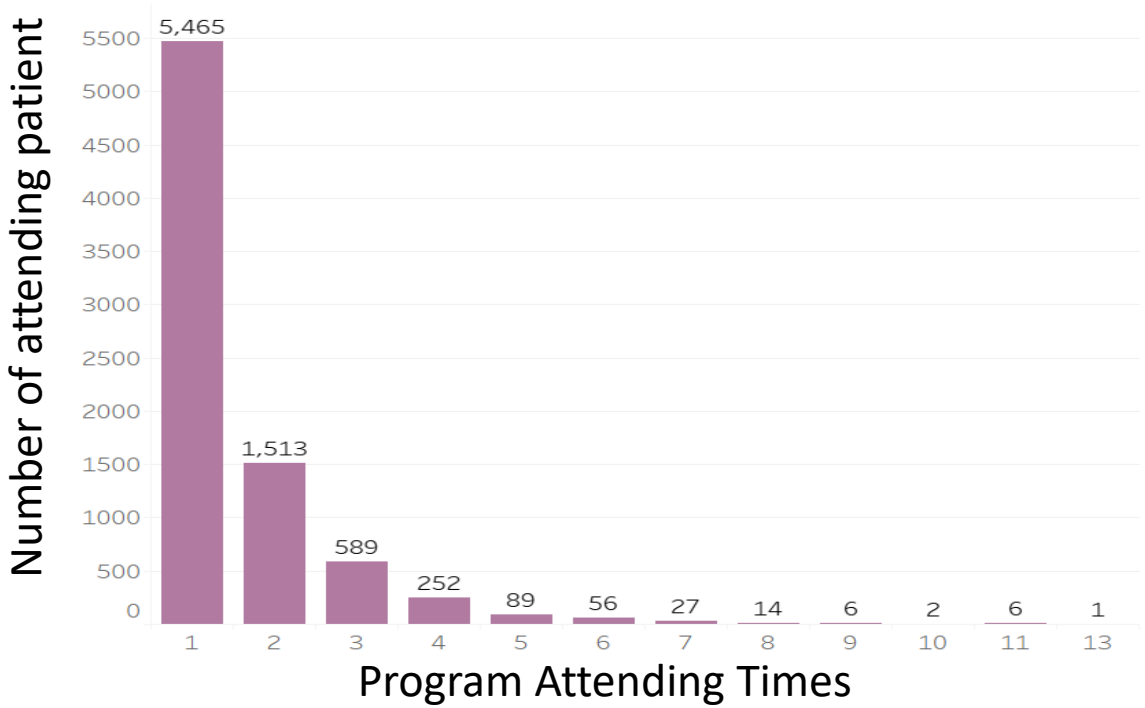
- Community Residence Program: **CD Community Res/Congregate**
- Intensive Residence Program: **Other group residence**
- Outpatient Program: **Private Residence**



Overview – Program Attending

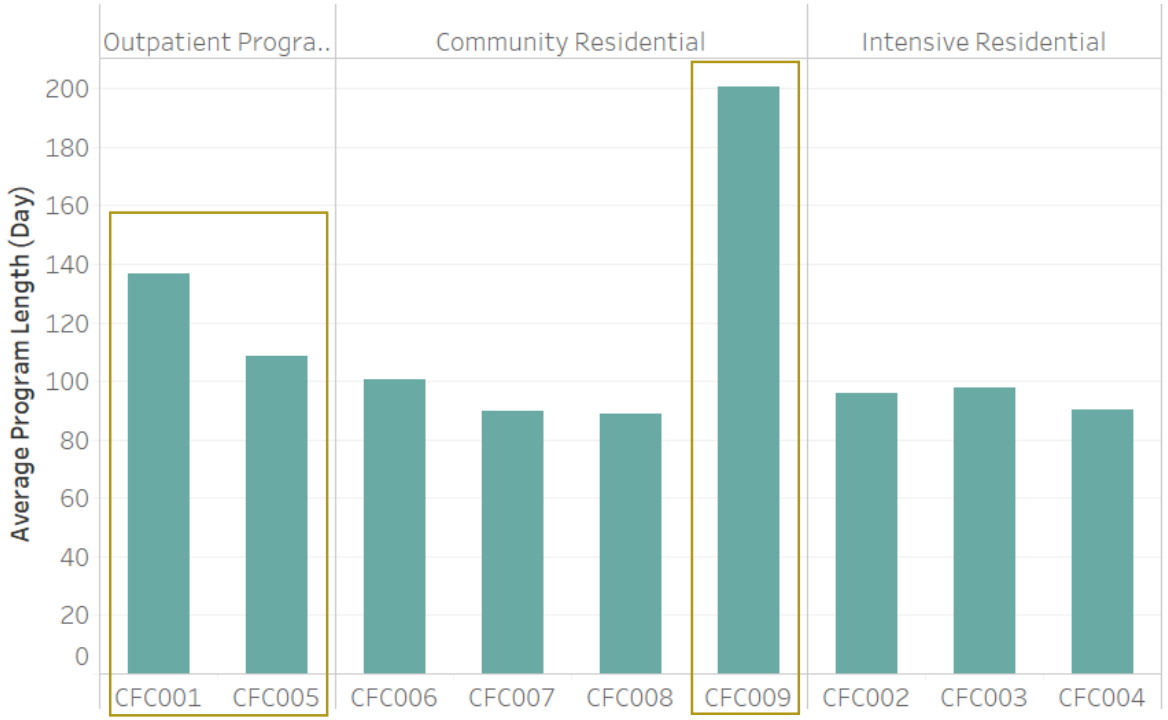
❑ Attending Frequency

- **68%** of the total patients attend the program **only once**
- **50%** of the patient will continue seek help from CFC after attending one program



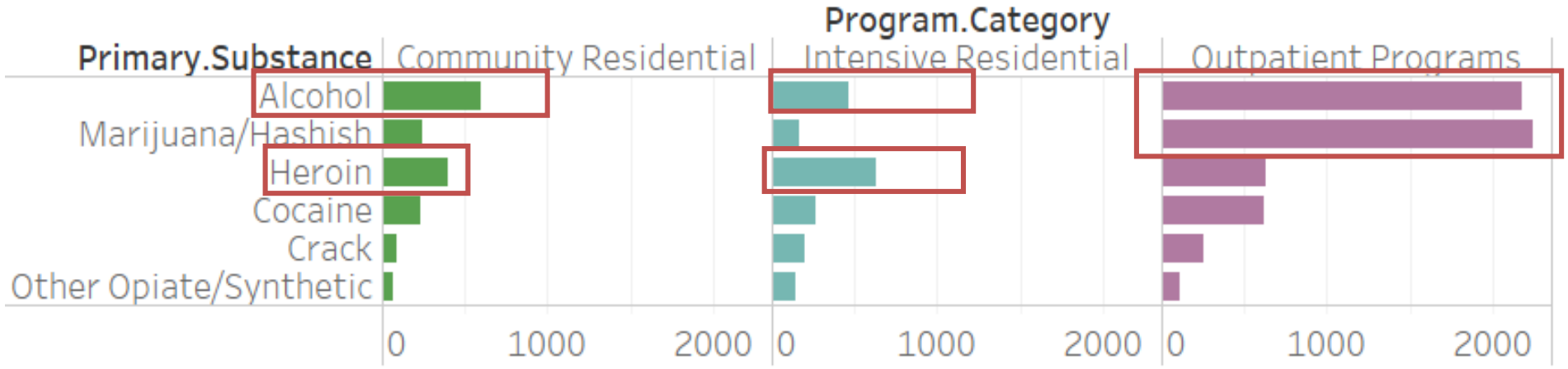
❑ Program Length

- CFC009 is extra long: **200 days**
- **Outpatient Programs** are on average **longer** than Community Residential and Intensive Residential



Overview – Admission Status

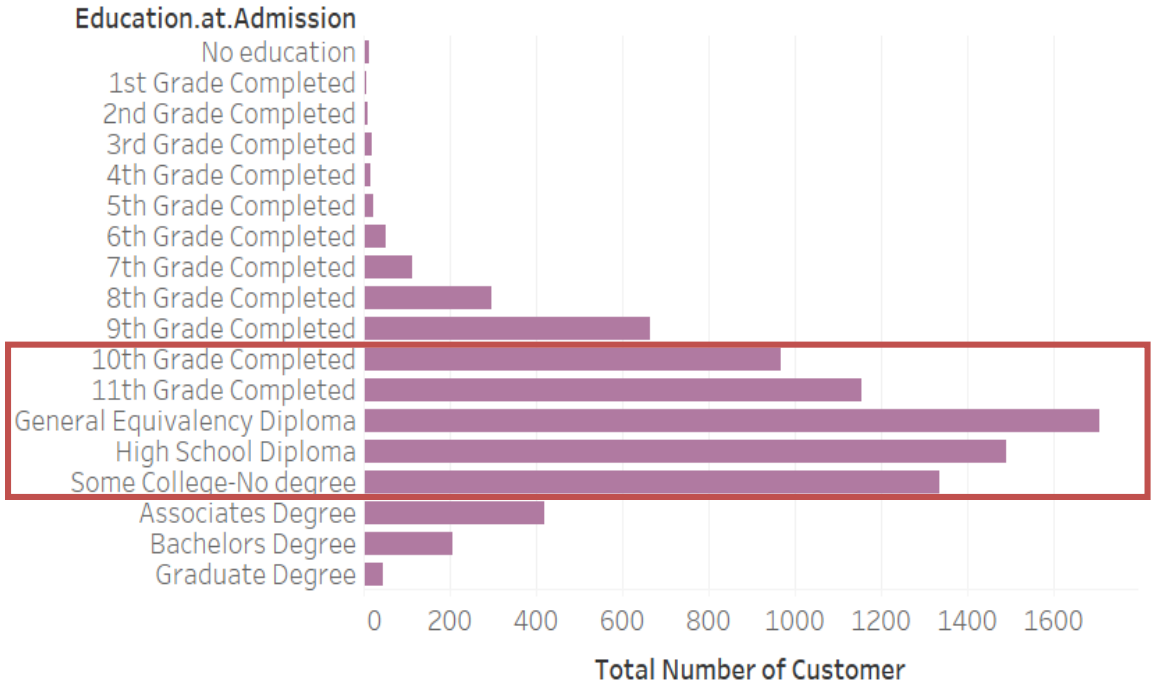
❑ Primary Substance at admission



- **Alcohol** is the biggest primary substance
- Community Residential & Intensive Residential: **Alcohol and Heroin**
- Outpatient Program: **Alcohol and Marijuana**

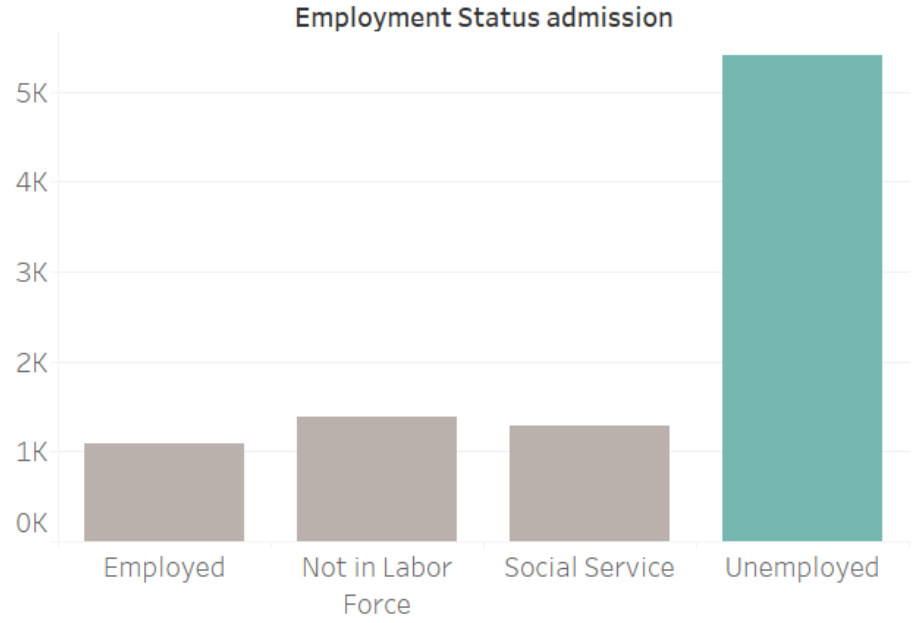
Overview – Admission Status

❑ Education at Admission



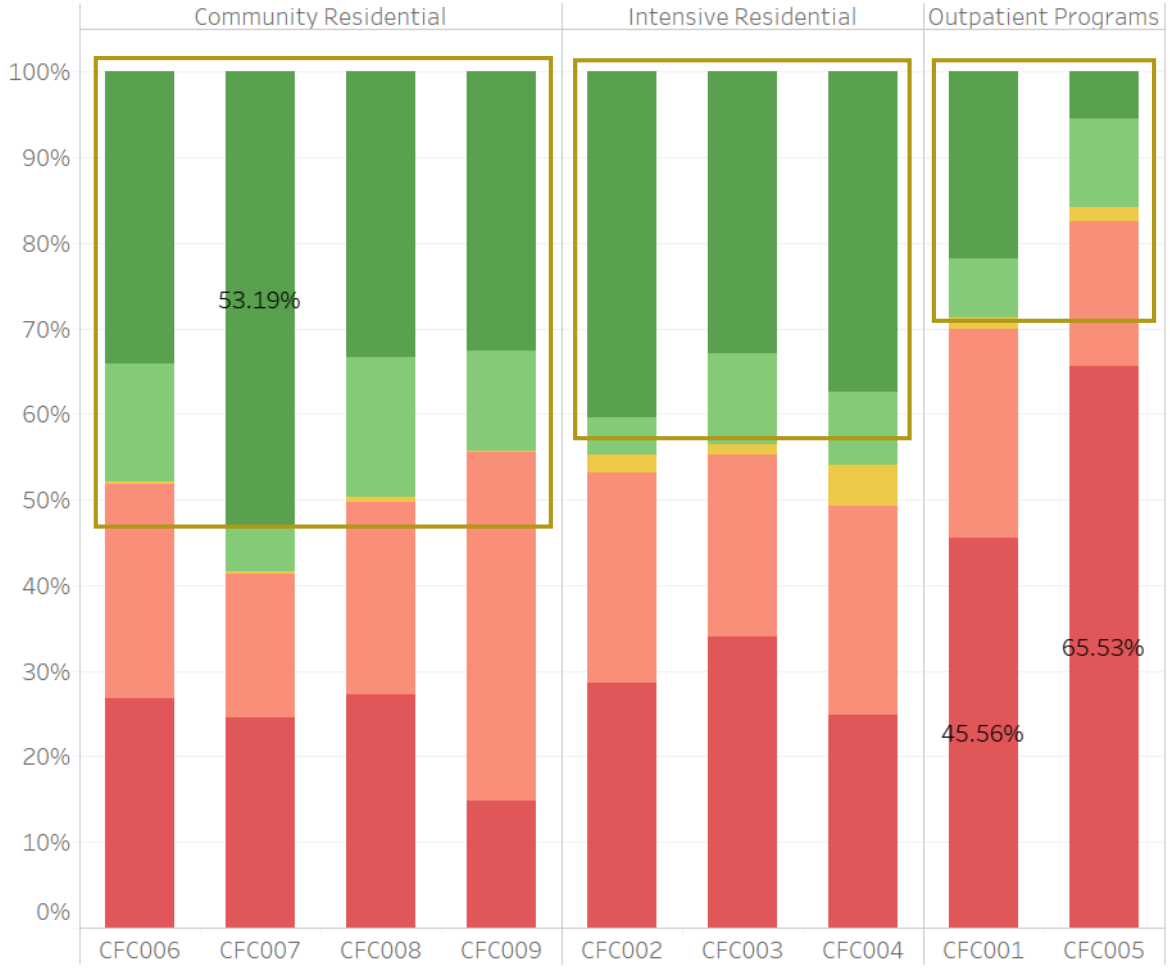
- **Education Level:** 10th Grade to Some College

❑ Employment at Admission



- **Employment:** Mostly Unemployed

Overview – Completion Rate



- Percentage of Discharge Status by Program
  - Proportion of discharge status varies among different programs.
  - Completion Rate: **Community Residential > Intensive Residential> Outpatient Programs**
  - **CFC007** has **highest** completion rate
  - **CFC005** has **lowest** completion rate

Discharge.Status
- Completed Treatment: All treatment goals met
- Completed Treatment: Half or More Goals Met
- Treat Not Complete: Max Benefit Clinical Disch
- Treatment Not Complete: Some Goals Met
- Treatment Not Complete: No goals met

Effectiveness

2

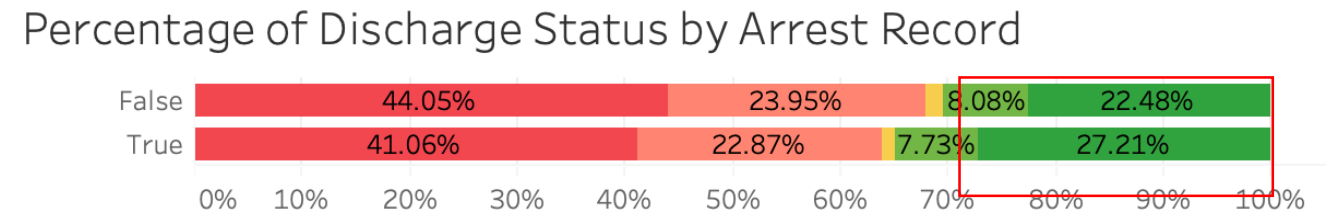
- Discharge Status
- Return Rate
- Goal Completeness by Program
- Employment Change

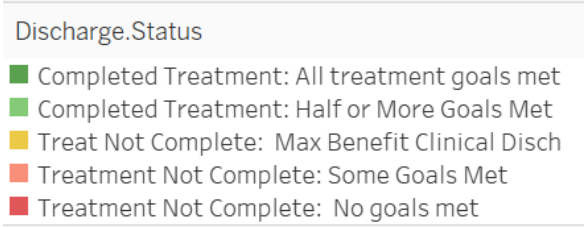
Since 1917

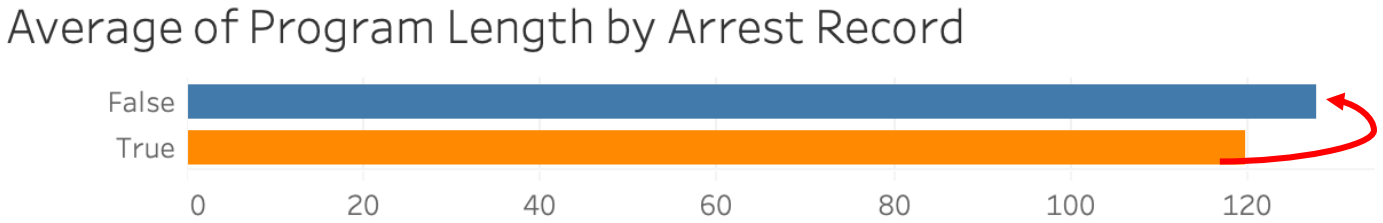
CATHOLIC FAMILY CENTER

Give people hope and they can do anything

Discharge Status by Arrest Record/Prior Treatment Episodes

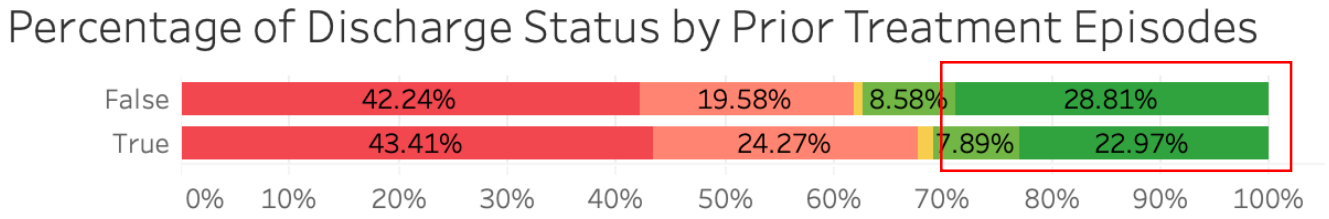


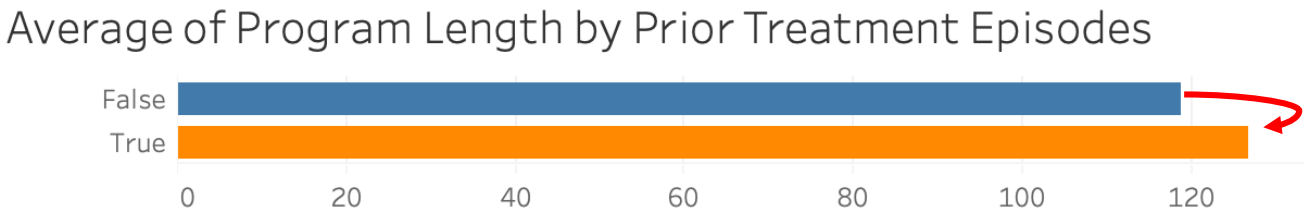




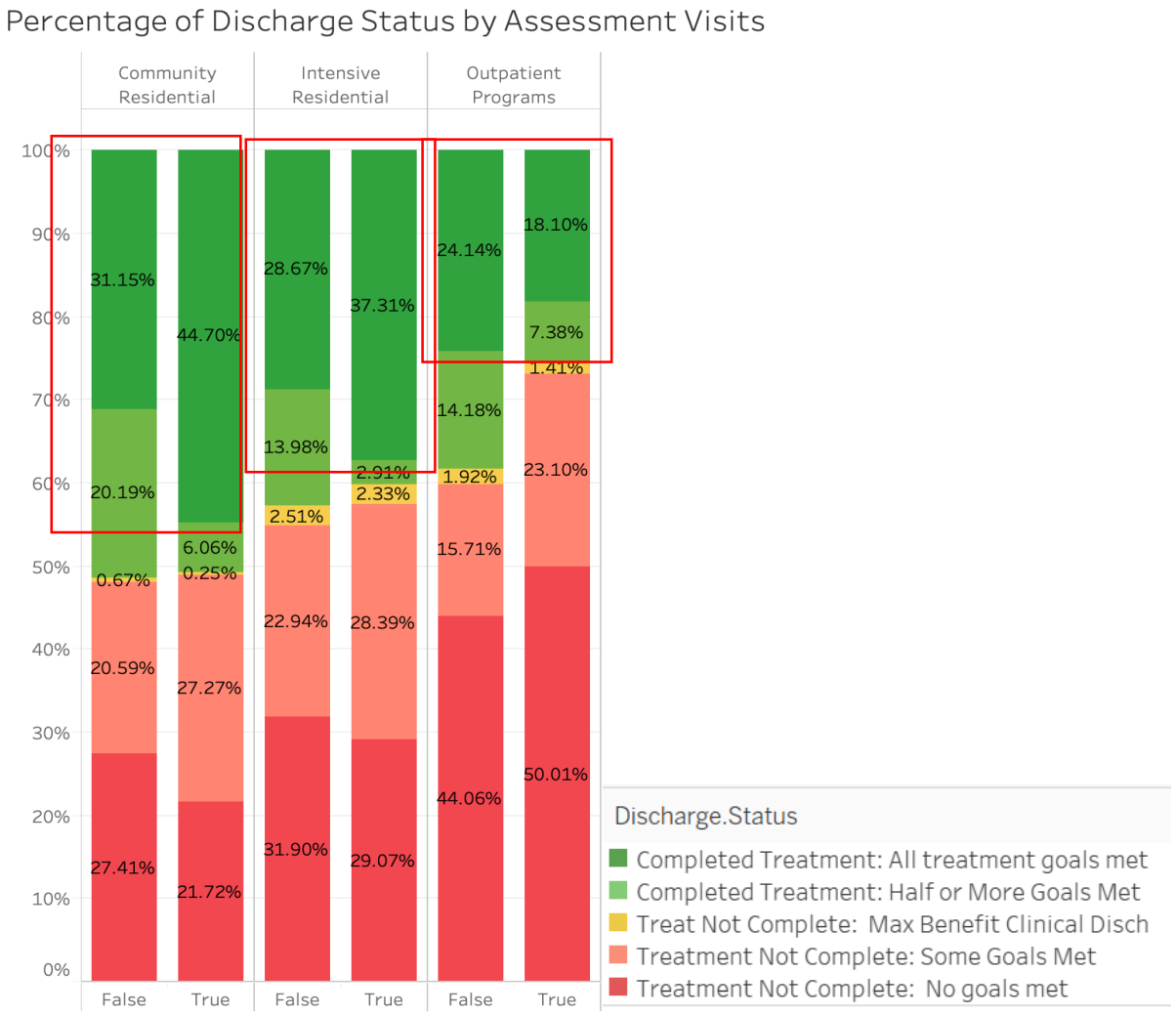
❑ Had Arrest Record
- Higher completion rate
- Shorter program length

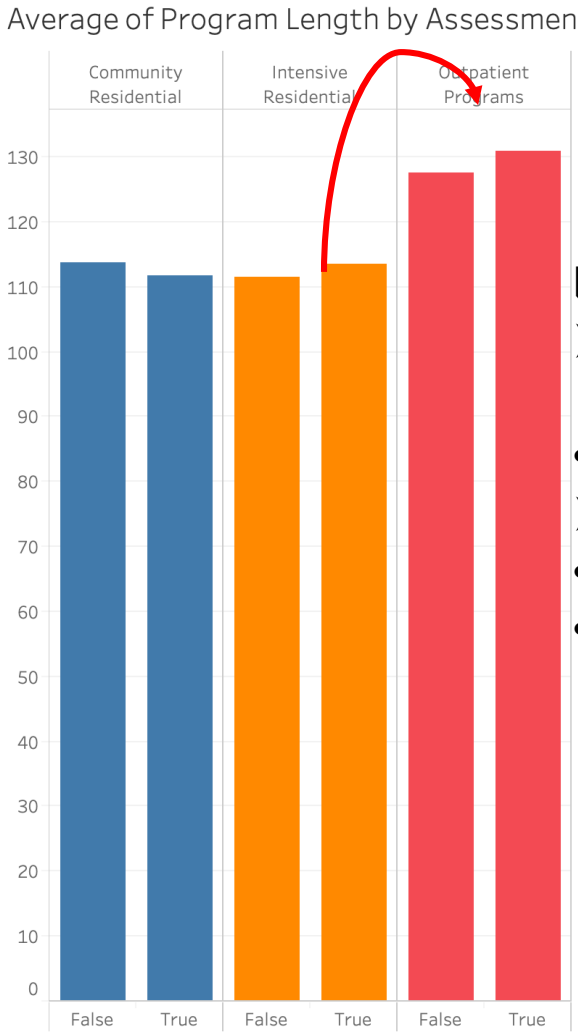
❑ Didn't have Prior Treatment Episodes
- Higher completion rate
- Shorter program length





Discharge Status by Assessment Visits

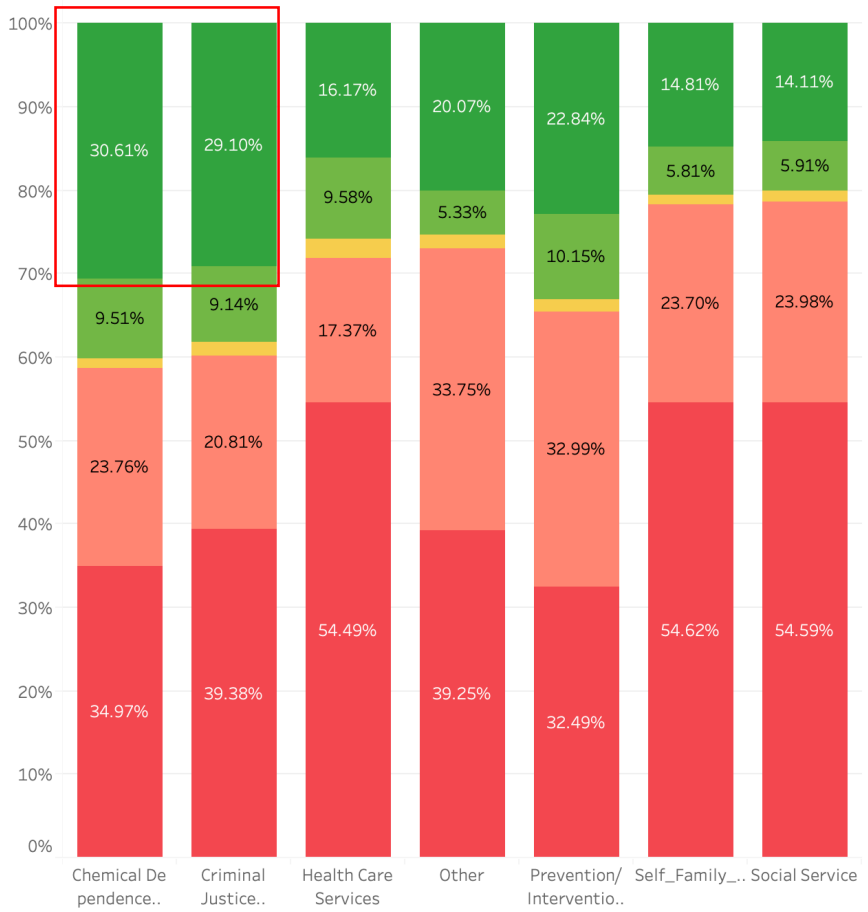




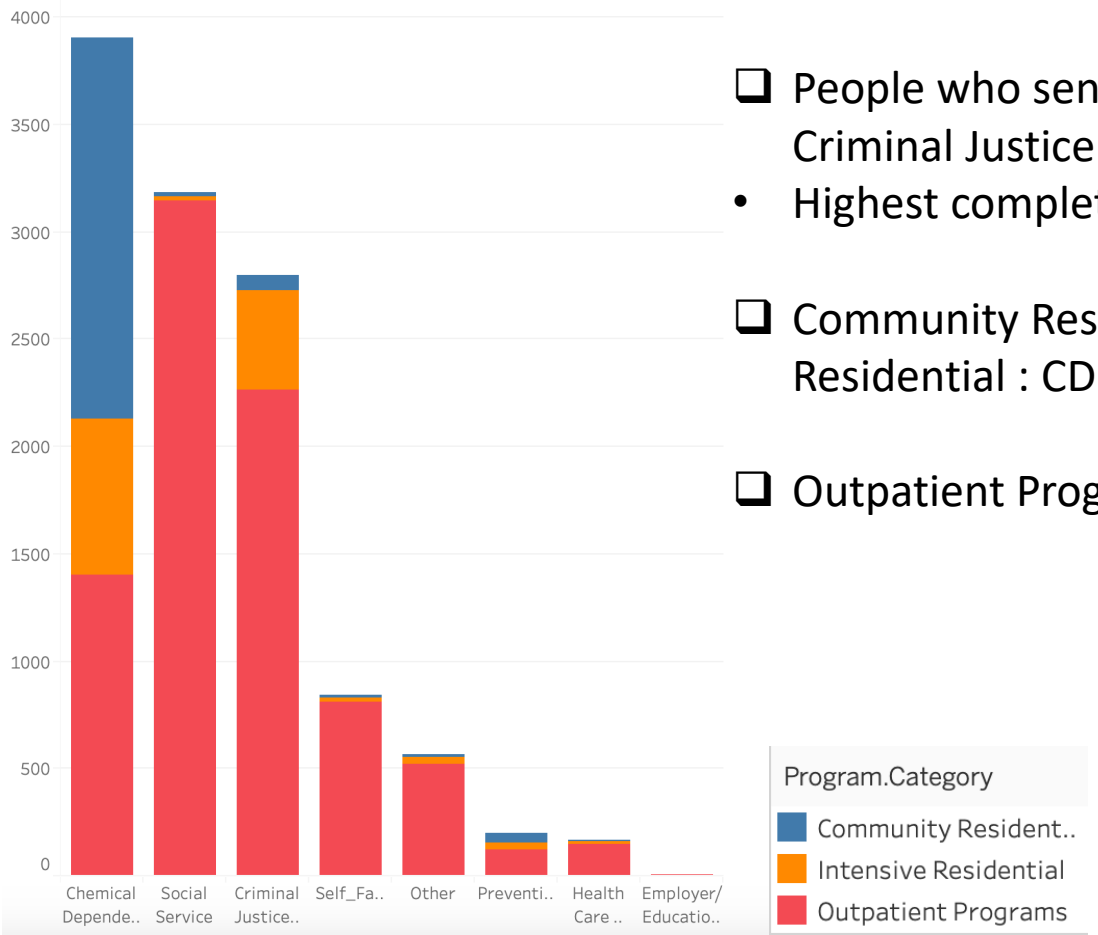
- ❑ Had Assessment Visits
  - ➢ Community Residential & Intensive Residential
    - Higher completion rate
  - ➢ Outpatient Programs
    - Lower completion rate
    - Longer program length

Discharge Status by Principal Referral Source

Percentage of Discharge Status by Principal Referral Source



Num of Records by Principal Referral Source



- ❑ People who sent by CD treatment & Criminal Justice Service
- Highest completion rate
- ❑ Community Residential & Intensive Residential : CD treatment
- ❑ Outpatient Programs: Social service

Community Residential has the highest Return Rate

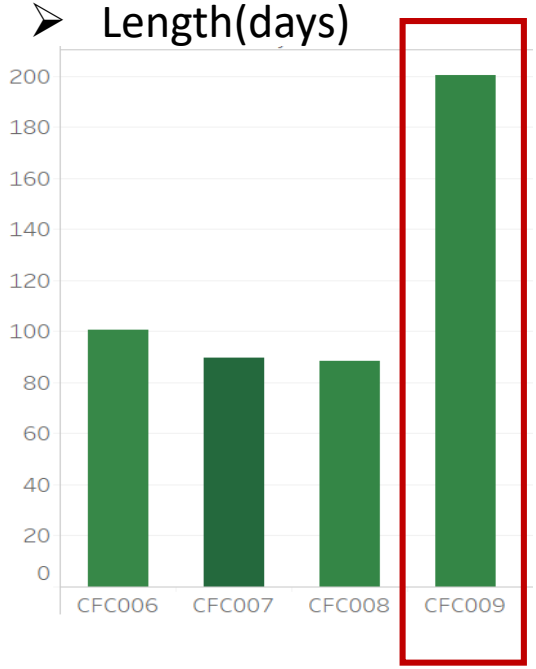
❑ **Return Rate: Patients with all goals met**

Community Residential > Intensive Residential> Outpatient Programs

Effectiveness – Return Rate for Community Residential

- Return Rate

- Length(days)



- Discharge Status

- **CFC009**

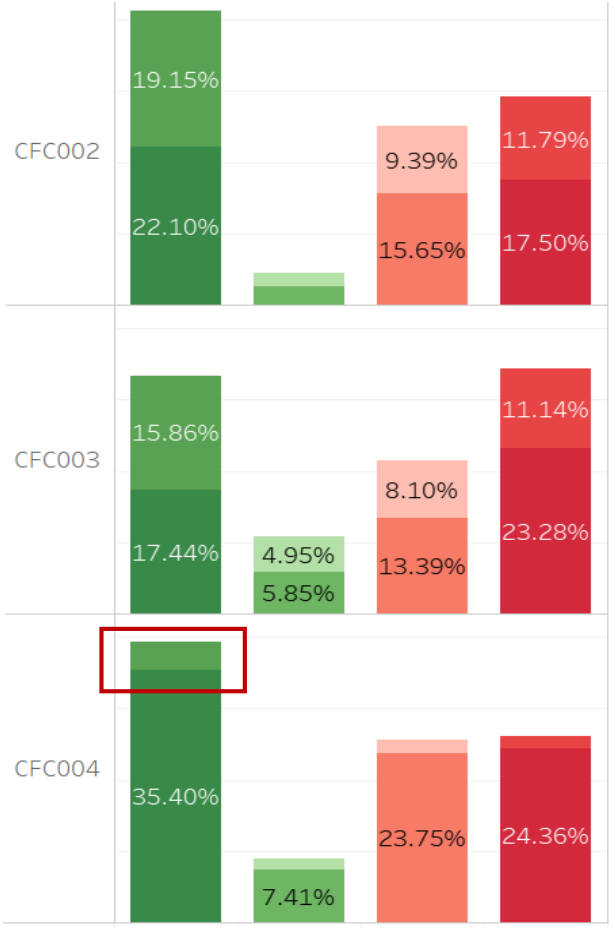
  Lower return rate and largest program length

- **CFC007**

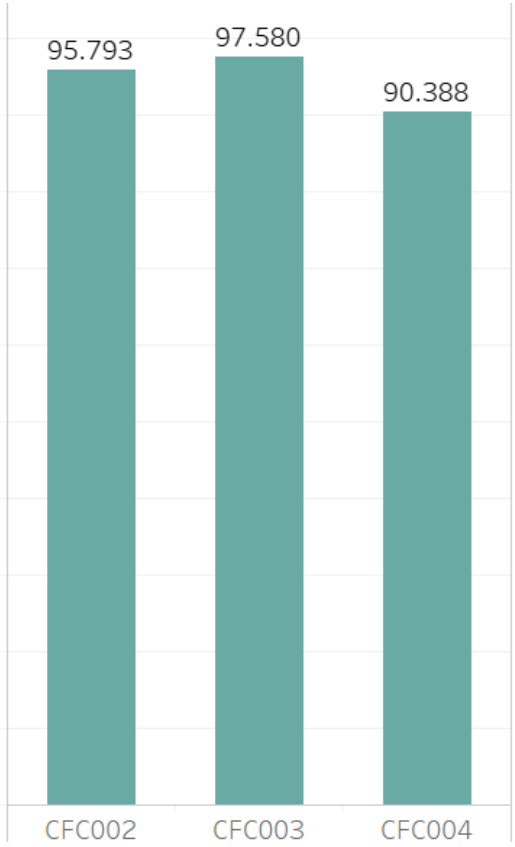
  High complete rate and higher return rate

Effectiveness – Return Rate for Intensive Residential

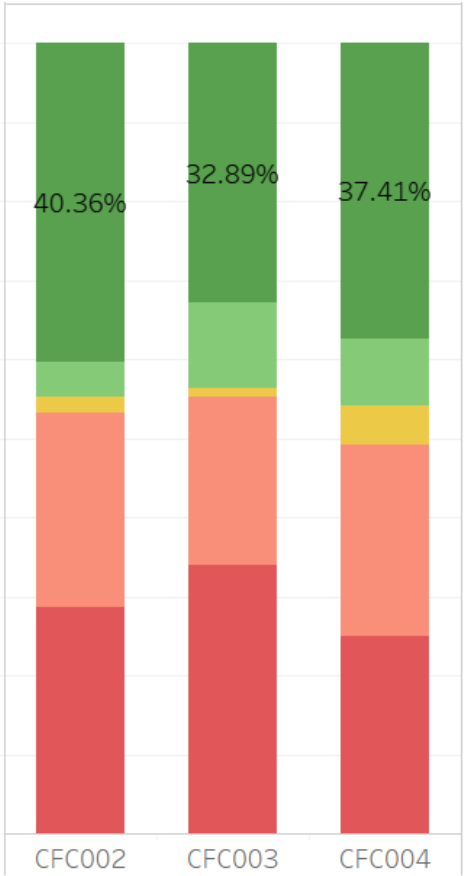
- Return Rate



- Length(days)



- Discharge Status

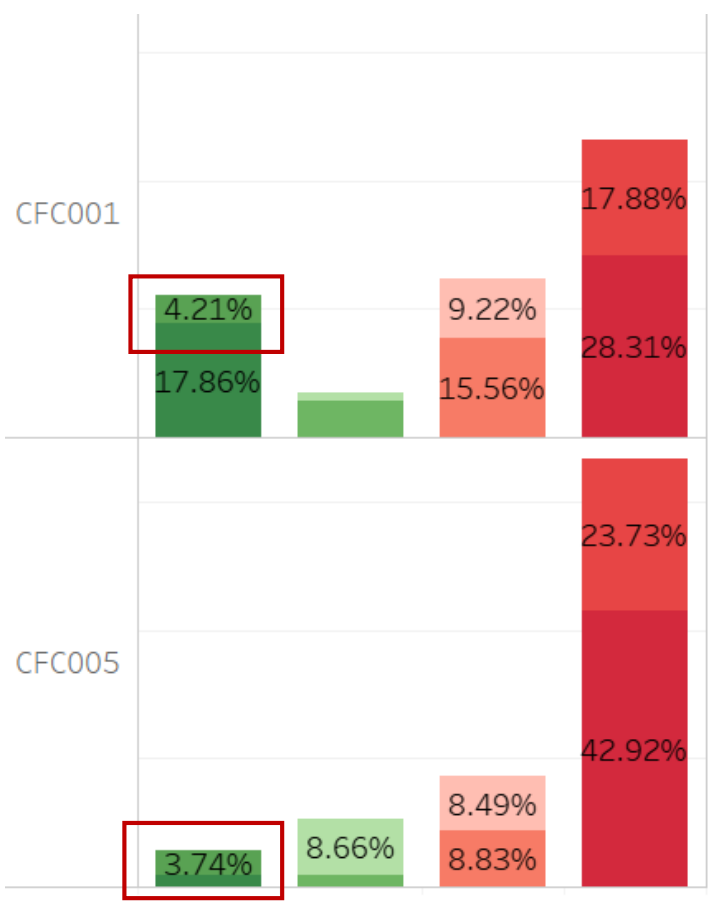


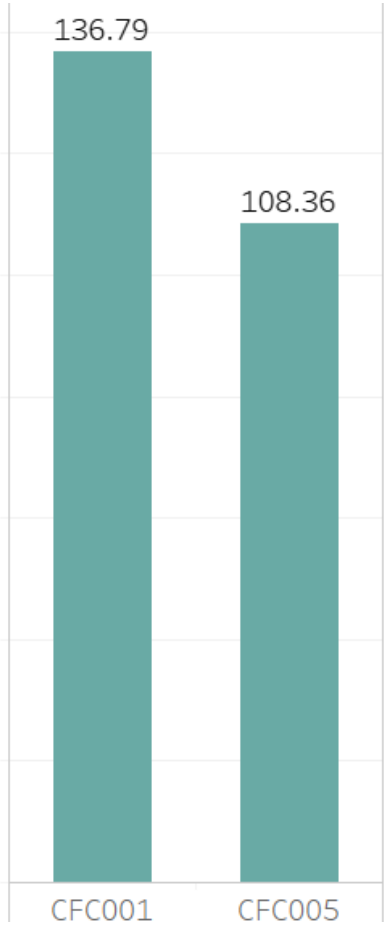
❑ **CFC004**

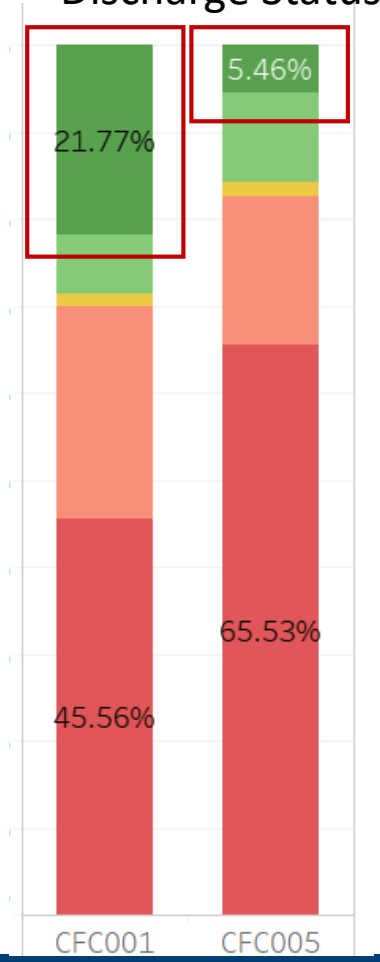
- Lowest return rate
- Principle Referral Service: Chemical Dependence Treatment /Criminal Justice Service
- Youngest: 28 average age at admission

Effectiveness – Return Rate for Outpatient Programs

- Return Rate
- Length(days)
- Discharge Status

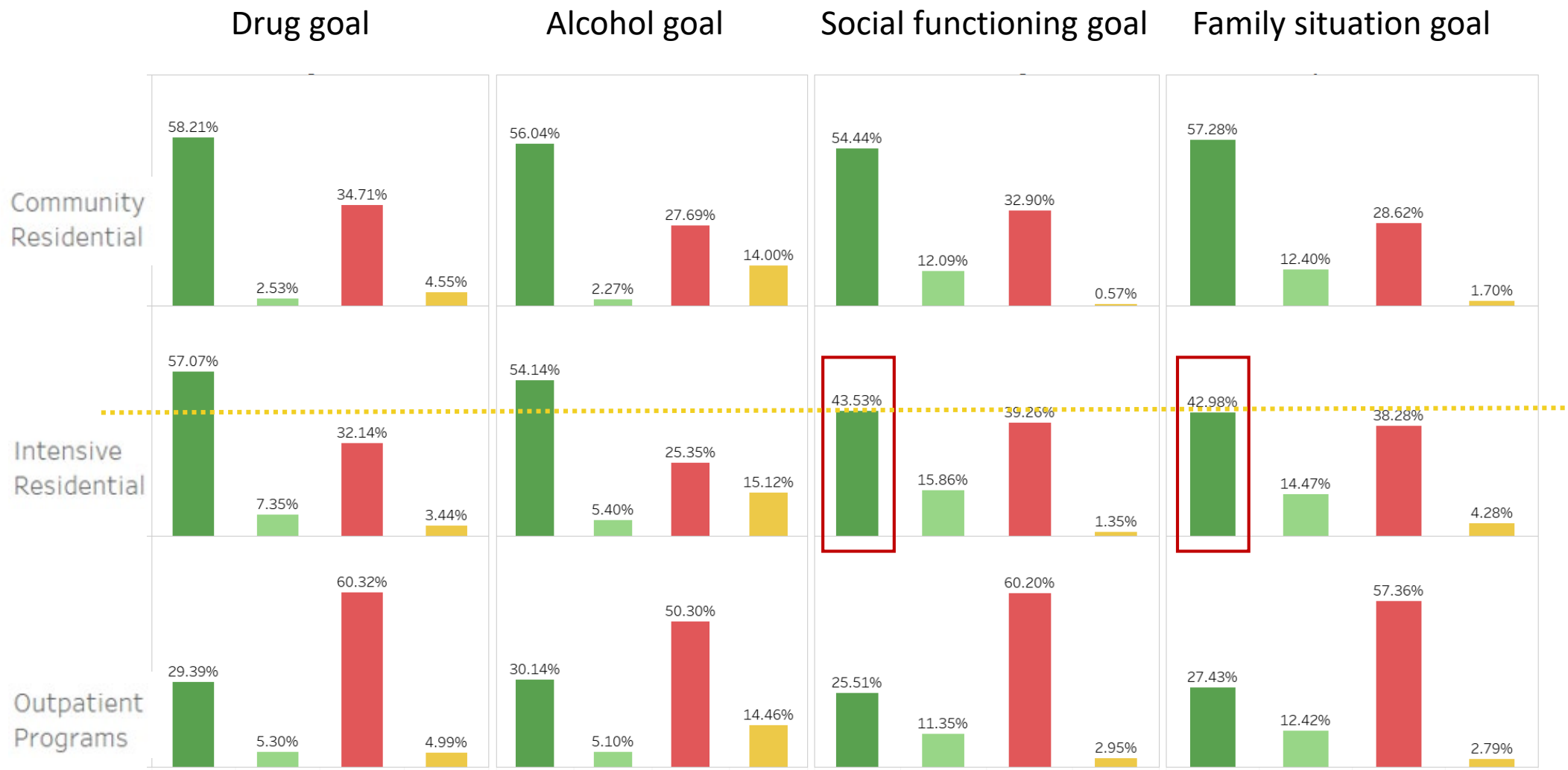






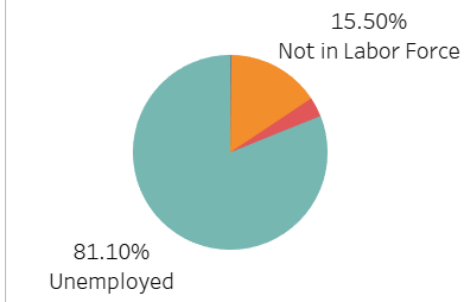
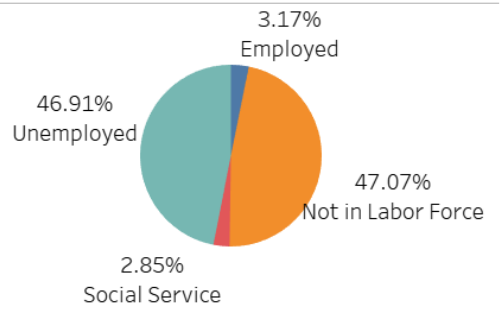
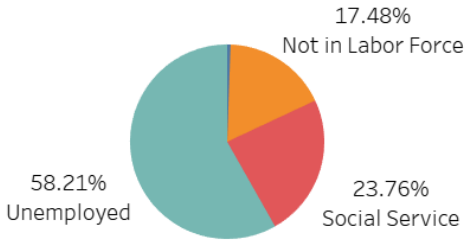
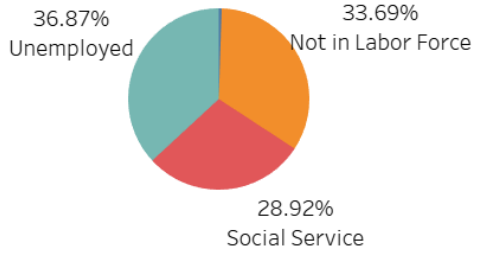
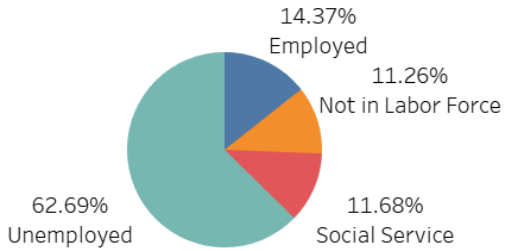
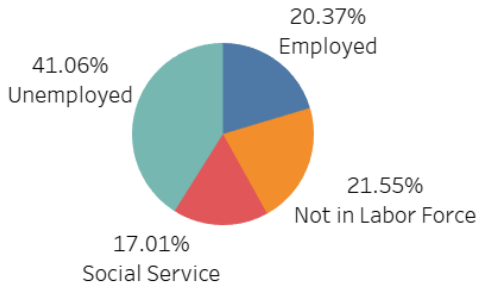
- **CFC001**
  Higher complete rate
  lower return rate
- **CFC005**
  Lower complete rate
  higher return rate

Effectiveness - Goal Completeness By Program

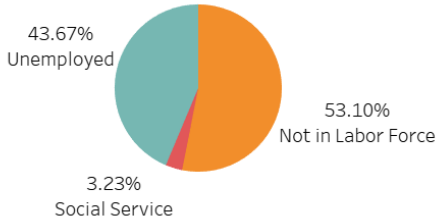


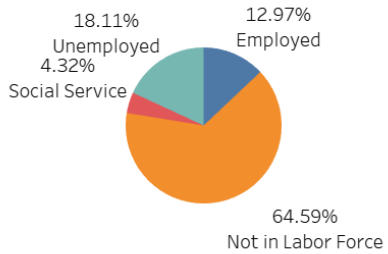
- Residential programs have higher complete rate.
- Outpatient programs have higher non-complete rate.

Effectiveness - Employment Change

	Employment at Admission	Employment at Discharge
Community Residential		
Intensive Residential		
Outpatient Programs		

Most effective program: CFC009





- For community residential, unemployment rate decreases by **34%**.
- For intensive residential, unemployment rate decreases by **21%**.
- For outpatient programs, unemployment rate decreases by **21%**.

Trajectory

3

- Individual Level
- Program Level
- Completeness
- Most Efficient Trajectory
- Overlapped Trajectory

Since 1917

CATHOLIC FAMILY CENTER

Give people hope and they can do anything

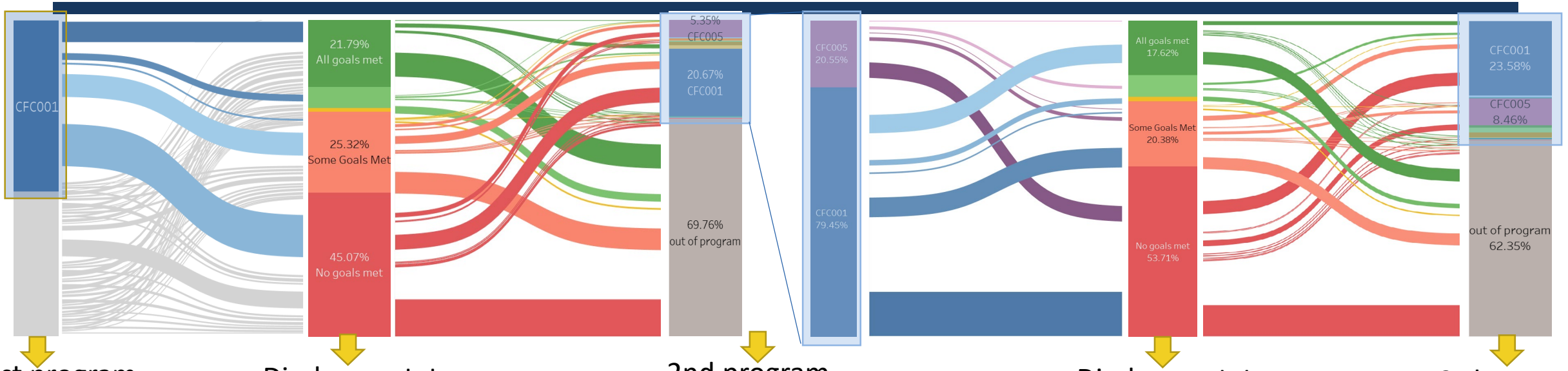
Trajectory - Individual Level

- Colors: Programs
- Size: Program Length

Patient: C00239
Period: 2009 – 2014 (6 years)
Programs:CF001,CF003,CF005,CF007,CF008,CF009 (13)
Avg Program Length: 121.5 Days

Patient: C01943
Period: 2009 – 2017 (8 years)
Programs: CF001,CF005 (7)
Avg Program Length: 215 Days

Trajectory - Program Level



1st program

56% of population

Discharge status of 1st program

2nd program

- CFC001
- CFC005
- Leave CFC

Discharge status of 2nd program

3rd program

- CFC001
- CFC005
- Leave CFC

- Same pattern among patients started with CFC005.
- Outpatient program --- 67% of patients
- Most common trajectories among all patients :
  - Stick to CFC001 or CFC005
  - Switch between CFC001 and CFC005

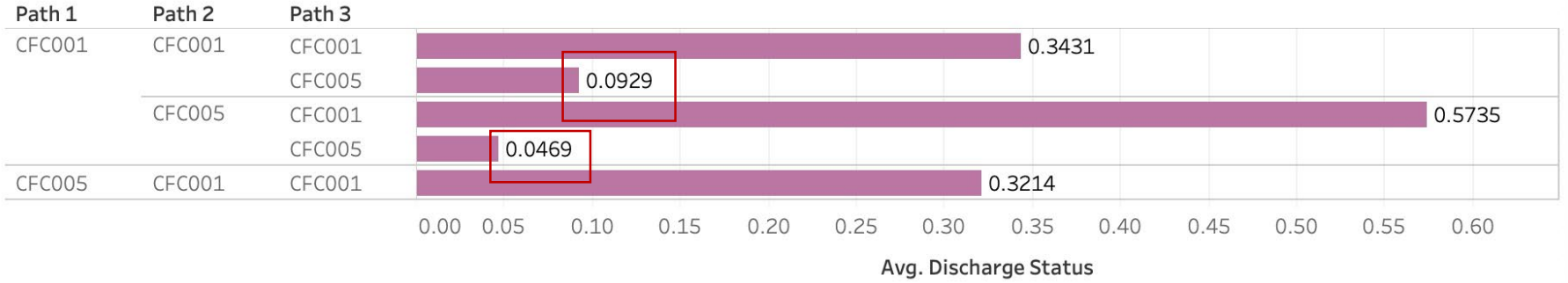
Trajectory –Completeness of CFC001 & CFC005

Discharge Status:
Completed Treatment: All Goals Met=1
Completed Treatment: Half or More Goals Mets=0.75
Treatment Not Completed: Maximum Benefit=0.5
Treatment Not Completed: Some goals Met=0.25
Treatment Not Completed: No Goals Met=0

Completeness rate = average Discharge Status in each trajectory

Completeness of people who attend 2 programs

Completeness of people who attend 3 programs



For attending 2 programs

- All the trajectories result in low completeness
- CFC005 as second program result in extremely low completeness

For attending 3 programs

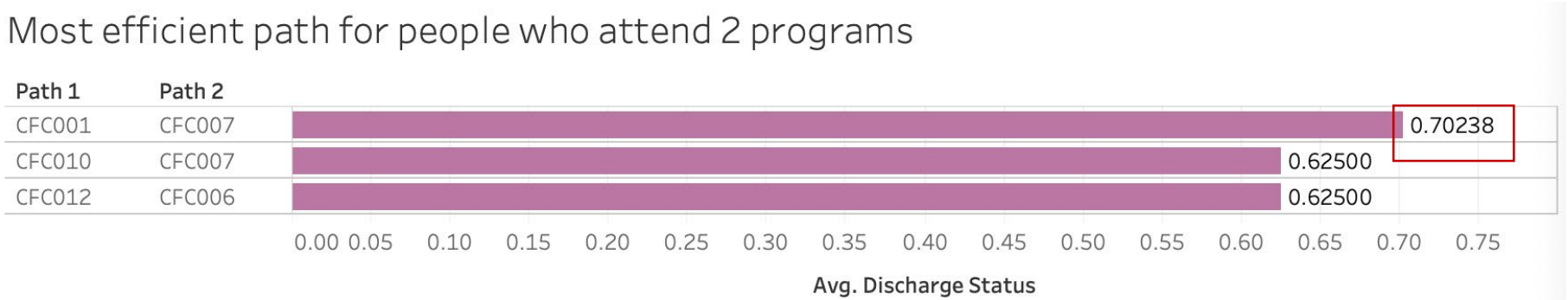
- CFC005 as second program result in a comparable high completeness
- CFC005 as the last program have very low completeness

Trajectory - Most Efficient Trajectory

CFC001➤CFC007 & CFC005➤CFC006➤CFC001

*Criteria of Efficient for **2 programs**:*

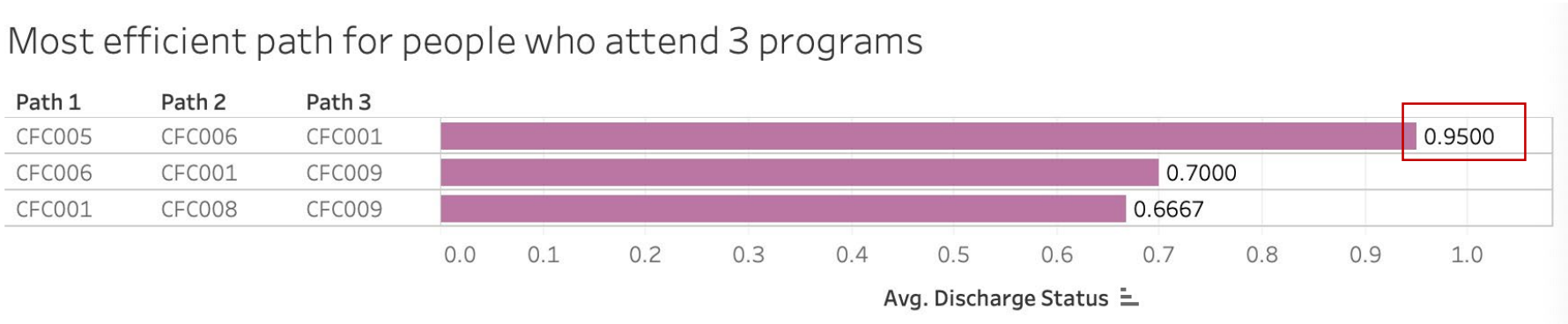
- *Completeness > 0.625*
- *More than 10 people in the path*



- Highest completeness of 2 programs trajectory: CFC001➤CFC007

*Criteria of Efficient for **3 programs**:*

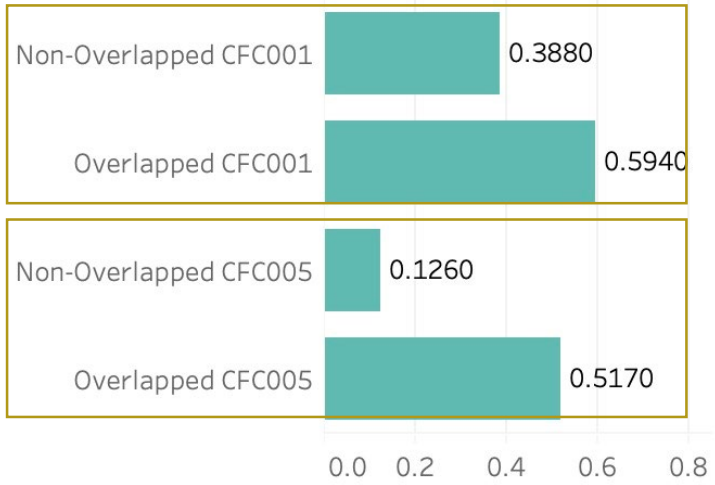
- *Completeness > 0.625*
- *More than 5 people in the path*



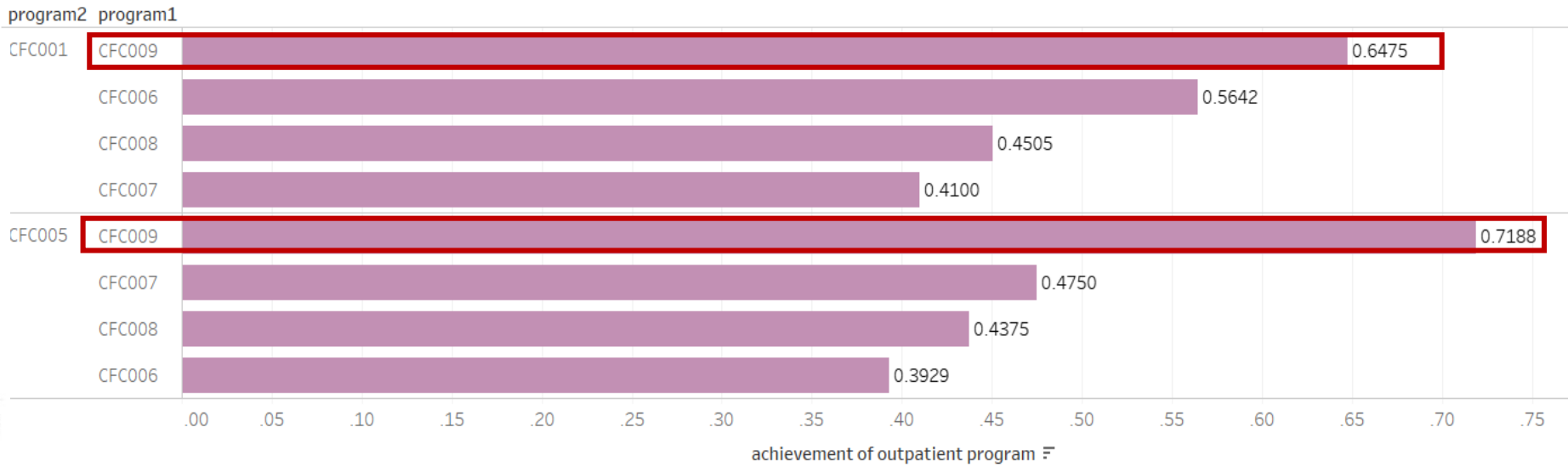
- Highest completeness of 3 programs trajectory: CFC005➤CFC006➤CFC001

Trajectory - Overlapped Trajectory

- Comparison between non-overlapped and overlapped



- Completeness of overlapped programs



- Patients only attend CFC001 or CFC005 and one other community residential program simultaneously
- Patients attend two programs simultaneously result in better completeness rate than attending one
- No matter which outpatient program to attend, attending CFC009 simultaneously result in better completeness rate

Conclusion & Recommendation

1. **Community Residential programs perform best among all the programs.**

2. **Outpatient programs: CFC001 and CFC005 are the most popular programs but perform worse.**
   - Recommendation: Try to improve the quality of Outpatient programs

3. The program length has influence on discharge status and return rate, but the degree of influence depend on the program

4. The patient who have arrest record or sent by CD treatment & Criminal Justice Service perform better
   - Recommendation: Need further study on the people with these feature and optimize the strategy

5. Most efficient trajectory: **a.** CFC001➤CFC007 **b.** CFC005➤CFC006➤CFC001
   - Recommendation: Encourage patients to attend these trajectory

6. For the overlapped trajectory, attending CFC009 as community residential program simultaneously result in high completeness rate.
   - Recommendation: Encourage patients to attend CFC009 while attending CFC001 or CFC005

Q&A